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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/819,401

DATE: 03/27/2002

TIME: 13:57:52

Input Set : D:\39727-20007.txt

Output Set: N:\CRF3\03272002\I819401.raw

4 <110> APPLICANT: Humeau, Laurent  
5 Li, Yuexia  
6 Merling, Randal  
7 Dropulic, Boro  
8 Sconely, Kathy L.  
11 <120> TITLE OF INVENTION: CONDITIONALLY REPLICATING VECTORS  
12 FOR INHIBITING VIRAL INFECTIONS  
15 <130> FILE REFERENCE: 39727-20007.00  
17 <140> CURRENT APPLICATION NUMBER: US 09/819,401  
18 <141> CURRENT FILING DATE: 2001-03-27  
20 <160> NUMBER OF SEQ ID NOS: 18  
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
24 <210> SEQ ID NO: 1  
25 <211> LENGTH: 39  
26 <212> TYPE: DNA  
27 <213> ORGANISM: Artificial Sequence  
29 <220> FEATURE:  
30 <223> OTHER INFORMATION: Oligonucleotide encoded wild-type HIV US sequence  
32 <400> SEQUENCE: 1  
33 gtgtgcccggt ctgttgttg actctggtaa ctagagatc 39  
35 <210> SEQ ID NO: 2  
36 <211> LENGTH: 39  
37 <212> TYPE: DNA  
38 <213> ORGANISM: Artificial Sequence  
40 <220> FEATURE:  
41 <223> OTHER INFORMATION: Vector sequence  
43 <400> SEQUENCE: 2  
44 gtgtcccac ctgttgttg actctggcag ctagagaac 39  
46 <210> SEQ ID NO: 3  
47 <211> LENGTH: 40  
48 <212> TYPE: DNA  
49 <213> ORGANISM: Artificial Sequence  
51 <220> FEATURE:  
52 <223> OTHER INFORMATION: Sequence encoded ribozyme  
54 <400> SEQUENCE: 3  
55 cacacaacac tcatggggcc gaaaggccga aacgggcaca 40  
57 <210> SEQ ID NO: 4  
58 <211> LENGTH: 40  
59 <212> TYPE: DNA  
60 <213> ORGANISM: Artificial Sequence  
62 <220> FEATURE:  
63 <223> OTHER INFORMATION: Sequence encoded ribozyme  
65 <400> SEQUENCE: 4

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66 atctctagtc tgatgaggcc gaaaggccga aaccagagtc          40
68 <210> SEQ ID NO: 5
69 <211> LENGTH: 39
70 <212> TYPE: DNA
71 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: Vector sequence
76 <400> SEQUENCE: 5
77 gtgtccccgc ctgttggc actctggtaa ctagagatc          39
79 <210> SEQ ID NO: 6
80 <211> LENGTH: 39
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Vector sequence
87 <400> SEQUENCE: 6
88 gtgtccccgt ctgttggc actctggcaa ctagagatc          39
90 <210> SEQ ID NO: 7
91 <211> LENGTH: 15
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Consensus splice donor
98 <221> NAME/KEY: misc_feature
99 <222> LOCATION: (1)...(15)
100 <223> OTHER INFORMATION: n = A,T,C or G
102 <400> SEQUENCE: 7
W--> 103 nnnnaggtaa gtnnn          15
105 <210> SEQ ID NO: 8
106 <211> LENGTH: 15
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Beta-globin splice donor
113 <221> NAME/KEY: misc_feature
114 <222> LOCATION: (1)...(15)
115 <223> OTHER INFORMATION: n = A,T,C or G
117 <400> SEQUENCE: 8
W--> 118 ngggcaggtt agtat          15
120 <210> SEQ ID NO: 9
121 <211> LENGTH: 15
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
126 <223> OTHER INFORMATION: HIV major splice donor
128 <221> NAME/KEY: misc_feature
129 <222> LOCATION: (1)...(15)
130 <223> OTHER INFORMATION: n = A,T,C or G
132 <400> SEQUENCE: 9
  
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W--> 133 nngactggtg agtan          15
  135 <210> SEQ ID NO: 10
  136 <211> LENGTH: 15
  137 <212> TYPE: DNA
  138 <213> ORGANISM: Artificial Sequence
  140 <220> FEATURE:
  141 <223> OTHER INFORMATION: HIV-1 env splice donor
  143 <400> SEQUENCE: 10
  144 aaagcagtaa gtagt          15
  146 <210> SEQ ID NO: 11
  147 <211> LENGTH: 15
  148 <212> TYPE: DNA
  149 <213> ORGANISM: Artificial Sequence
  151 <220> FEATURE:
  152 <223> OTHER INFORMATION: HIV-2 env splice donor
  154 <400> SEQUENCE: 11
  155 agacaagtga gtaag          15
  157 <210> SEQ ID NO: 12
  158 <211> LENGTH: 15
  159 <212> TYPE: DNA
  160 <213> ORGANISM: Artificial Sequence
  162 <220> FEATURE:
  163 <223> OTHER INFORMATION: HIV-2 major splice donor
  165 <221> NAME/KEY: misc_feature
  166 <222> LOCATION: (1)...(15)
  167 <223> OTHER INFORMATION: n = A,T,C or G
  169 <400> SEQUENCE: 12
W--> 170 nngaaggtaa gtgcn          15
  172 <210> SEQ ID NO: 13
  173 <211> LENGTH: 112
  174 <212> TYPE: DNA
  175 <213> ORGANISM: Artificial Sequence
  177 <220> FEATURE:
  178 <223> OTHER INFORMATION: Double-stranded oligonucleotide
  180 <400> SEQUENCE: 13
  181 aagcttgcct tgagtgctca aagtagtgtg tgcccacctg ttgtgtgact ctggcagcta      60
  182 gagatcccac agaccctttt agtcagtgtg gaaaatctct agcagtggcg cc           112
  184 <210> SEQ ID NO: 14
  185 <211> LENGTH: 39
  186 <212> TYPE: DNA
  187 <213> ORGANISM: Artificial Sequence
  189 <220> FEATURE:
  190 <223> OTHER INFORMATION: Oligonucleotide with mutant nucleotides
  192 <221> NAME/KEY: misc_feature
  193 <222> LOCATION: (1)...(39)
  194 <223> OTHER INFORMATION: n = A,T,C or G
  196 <400> SEQUENCE: 14
W--> 197 gtgtgcccn ctgttgtgtg actctggnan ctagaganc          39
  199 <210> SEQ ID NO: 15

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200 <211> LENGTH: 39
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Mutated oligonucleotide
207 <400> SEQUENCE: 15
208 gtgtgccat ctgttgtgtg actctggtaa ctagagatc 39
210 <210> SEQ ID NO: 16
211 <211> LENGTH: 39
212 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Mutated oligonucleotide
218 <400> SEQUENCE: 16
219 gtgtgccgt ctgttgtgtg actctggtag ctagagatc 39
221 <210> SEQ ID NO: 17
222 <211> LENGTH: 16
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Analog splice donor
229 <221> NAME/KEY: misc_feature
230 <222> LOCATION: (1)...(16)
231 <223> OTHER INFORMATION: n = A,T,C or G
233 <400> SEQUENCE: 17
W--> 234 cttcagggtg agttnn 16
236 <210> SEQ ID NO: 18
237 <211> LENGTH: 1185
238 <212> TYPE: PRT
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: Amino acid sequence of a chimeric HIV CTL epitope
244 <400> SEQUENCE: 18
245 Met Lys Ile Arg Leu Arg Pro Gly Gly Asn Lys Lys Tyr Lys Leu Lys
246 1 5 10 15
247 His Ile Val Trp Ala Ser Arg Glu Leu Glu Arg Phe Gly Ser Glu Glu
248 20 25 30
249 Leu Arg Ser Leu Tyr Asn Thr Val Ala Val Leu Tyr Cys Val His Gln
250 35 40 45
251 Lys Ile Glu Val Lys Asp Thr Lys Glu Ala Leu Asp Thr Glu Asn Arg
252 50 55 60
253 Asn Gln Glu Ser Gln Asn Tyr Pro Ile Val Gln Asn Leu Gly Gln Met
254 65 70 75 80
255 Val His Gln Ala Leu Ser Pro Arg Thr Leu Asn Ala Trp Val Lys Val
256 85 90 95
257 Ile Glu Glu Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe Ser Ala
258 100 105 110
259 Leu Ser Glu Gly Ala Thr Pro Gln Asp Leu Asn Thr Met Leu Asn Thr
260 115 120 125

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Input Set : D:\39727-20007.txt  
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261 Val Gly Gly His Gln Ala Ala Met Gln Met Leu Lys Ala Thr Ile Asn  
262 130 135 140  
263 Glu Glu Ala Ala Glu Trp Asp Arg Leu His Pro Val His Ala Gly Pro  
264 145 150 155 160  
265 Ile Ala Pro Gly Gln Met Arg Glu Pro Arg Gly Thr Ser Thr Leu Gln  
266 165 170 175  
267 Glu Gln Ile Ala Trp Met Thr Asn Asn Pro Pro Ile Pro Val Gly Glu  
268 180 185 190  
269 Ile Tyr Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys Ile Val Arg Met  
270 195 200 205  
271 Tyr Ser Pro Val Ser Ile Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys  
272 210 215 220  
273 Thr Leu Arg Ala Glu Gln Ala Thr Gln Glu Val Lys Asn Trp Met Thr  
274 225 230 235 240  
275 Glu Thr Leu Leu Val Gln Asn Ala Asn Pro Asp Cys Lys Thr Ile Leu  
276 245 250 255  
277 Lys Ala Leu Leu Glu Asp Met Met Thr Ala Cys Gln Gly Val Gly Gly  
278 260 265 270  
279 Pro Gly His Lys Ala Arg Leu Val Gln Glu Gly His Gln Met Lys Asp  
280 275 280 285  
281 Cys Thr Glu Arg Gln Ala Asn Phe Gly Asn Phe Pro Gln Ser Arg Leu  
282 290 295 300  
283 Glu Pro Thr Ala Pro Pro Glu Ile Thr Leu Trp Gln Arg Pro Leu Val  
284 305 310 315 320  
285 Asp Thr Val Leu Glu Asp Met Asn Leu Val Leu Val Gly Pro Thr Pro  
286 325 330 335  
287 Val Asn Ile Ser Pro Ile Glu Thr Val Pro Val Lys Leu Gly Pro Lys  
288 340 345 350  
289 Val Lys Gln Trp Pro Leu Ala Leu Val Glu Ile Cys Thr Glu Met Glu  
290 355 360 365  
291 Lys Glu Gly Lys Ile Ser Lys Ile Gly Pro Thr Val Leu Asp Val Gly  
292 370 375 380  
293 Asp Ala Tyr Phe Ser Val Pro Leu Asp Glu Asp Phe Arg Lys Tyr Thr  
294 385 390 395 400  
295 Ala Phe Thr Ile Pro Ser Ile Trp Lys Gly Ser Pro Ala Ile Phe Gln  
296 405 410 415  
297 Ser Ser Met Thr Lys Asn Pro Asp Ile Val Ile Tyr Gln Tyr Met Asp  
298 420 425 430  
299 Asp Leu Tyr Val Asp Leu Glu Glu Gly Gln His Arg Thr Lys Ile Glu  
300 435 440 445  
301 Glu Leu Arg Gln His Leu Leu Arg Trp Gly Phe Thr Thr Pro Asp Lys  
302 450 455 460  
303 Lys Pro Ile Lys Leu Pro Glu Lys Glu Ser Trp Leu Val Gly Lys Leu  
304 465 470 475 480  
305 Asn Trp Ala Ser Gln Ile Tyr Ala Gly Ile Lys Val Lys Gln Leu Ile  
306 485 490 495  
307 Pro Ile Thr Glu Glu Ala Glu Leu Glu Ile Leu Lys Glu Pro Val His  
308 500 505 510  
309 Gly Val Tyr Gln Ile Tyr Gln Glu Pro Phe Lys Asn Leu Lys Thr Gly

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/819,401

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Input Set : D:\39727-20007.txt  
Output Set: N:\CRF3\03272002\I819401.raw

L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17